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[Advanced Motion Control, 2004. AMC '04. The 8th IEEE International Workshop](#)
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Raza, H.; Ioannou, P.;
[Control Systems Magazine, IEEE](#)
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Yingmin Jia;
[Control Systems Technology, IEEE Transactions on](#)
Volume 8, Issue 3, May 2000 Page(s):554 - 569
Digital Object Identifier 10.1109/87.845885
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- ☐ 4. **Modeling and simulation study of the steer by wire system using bond graph**
Li Qiang; He Ren;
[Vehicular Electronics and Safety, 2005. IEEE International Conference on](#)
14-16 Oct. 2005 Page(s):7 - 11
Digital Object Identifier 10.1109/ICVES.2005.1563604
[AbstractPlus](#) | [Full Text: PDF\(879 KB\)](#) [IEEE CNF](#)
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- ☐ 5. **A control scheme for low speed automated vehicles with double steering**
Hemami, A.;
[Decision and Control, 1994. Proceedings of the 33rd IEEE Conference on](#)
Volume 3, 14-16 Dec. 1994 Page(s):2452 - 2454 vol.3
Digital Object Identifier 10.1109/CDC.1994.411508

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6. **Driver assisted fuzzy control of yaw dynamics for 4WD vehicles**
Qunzhi Zhou; Feiyue Wang;
[Intelligent Vehicles Symposium, 2004 IEEE](#)
14-17 June 2004 Page(s):425 - 430
Digital Object Identifier 10.1109/IVS.2004.1336421
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7. **The concept for the integration of tele-operated unmanned vehicle and di**
Duk-Sun Yun; Ji-Hyeok Choi; Gil-Young Lee; Jung-Ha Kim;
[Industrial Electronics, 2001. Proceedings. ISIE 2001. IEEE International Sympo](#)
Volume 3, 12-16 June 2001 Page(s):1419 - 1424 vol.3
Digital Object Identifier 10.1109/ISIE.2001.931913
[AbstractPlus](#) | Full Text: [PDF\(652 KB\)](#) IEEE CNF
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8. **Modeling, control, and validation of an electro-hydraulic steer-by-wire sy:**
articulated vehicle applications
Haggag, S.; Alstrom, D.; Cetinkunt, S.; Egelja, A.;
[Mechatronics, IEEE/ASME Transactions on](#)
Volume 10, Issue 6, Dec. 2005 Page(s):688 - 692
Digital Object Identifier 10.1109/TMECH.2005.859838
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9. **A practical solution to the string stability problem in autonomous vehicle**
Guang Lu; Tomizuka, M.;
[American Control Conference, 2004. Proceedings of the 2004](#)
Volume 1, 30 June-2 July 2004 Page(s):780 - 785 vol.1
[AbstractPlus](#) | Full Text: [PDF\(663 KB\)](#) IEEE CNF
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10. **Active steering control based on the estimated tire forces**
Kunsoo Huh; Chanwon Seo; Joonyoung Kim; Daegun Hong;
[American Control Conference, 1999. Proceedings of the 1999](#)
Volume 1, 2-4 June 1999 Page(s):729 - 733 vol.1
Digital Object Identifier 10.1109/ACC.1999.782923
[AbstractPlus](#) | Full Text: [PDF\(436 KB\)](#) IEEE CNF
[Rights and Permissions](#)
11. **A control of vehicle using steer-by-wire system with hardware-in-the-loop**
system
Seok-Hwan Jang; Tong-Jin Park; Chang-Soo Han;
[Advanced Intelligent Mechatronics, 2003. AIM 2003. Proceedings. 2003 IEEE/](#)
[International Conference on](#)
Volume 1, 20-24 July 2003 Page(s):389 - 394 vol.1
[AbstractPlus](#) | Full Text: [PDF\(458 KB\)](#) IEEE CNF
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12. **Design of vehicle lateral guidance system for driver assistance**
Kai-Ten Feng; Han-Shue Tan; Tomizuka, M.;
[American Control Conference, 2000. Proceedings of the 2000](#)
Volume 4, 28-30 June 2000 Page(s):2553 - 2557 vol.4
Digital Object Identifier 10.1109/ACC.2000.878668
[AbstractPlus](#) | Full Text: [PDF\(456 KB\)](#) IEEE CNF

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Litkouhi, B.B.; Lee, A.Y.; Craig, D.B.;
[Decision and Control, 1993. Proceedings of the 32nd IEEE Conference on](#)
15-17 Dec. 1993 Page(s):1868 - 1873 vol.2
Digital Object Identifier 10.1109/CDC.1993.325518
[AbstractPlus](#) | Full Text: [PDF\(464 KB\)](#) IEEE CNF
[Rights and Permissions](#)
14. **Steering characteristics of an exploration rover on loose soil based on al dynamics model**
Ishigami, G.; Yoshida, K.;
[Intelligent Robots and Systems, 2005. \(IROS 2005\). 2005 IEEE/RSJ Internatic](#)
[on](#)
2-6 Aug. 2005 Page(s):3099 - 3104
Digital Object Identifier 10.1109/IROS.2005.1545277
[AbstractPlus](#) | Full Text: [PDF\(280 KB\)](#) IEEE CNF
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15. **Coordination of steering and individual wheel braking actuated vehicle y: control**
Guvenç, B.A.; Acarman, T.; Guvenç, L.;
[Intelligent Vehicles Symposium, 2003. Proceedings. IEEE](#)
9-11 June 2003 Page(s):288 - 293
Digital Object Identifier 10.1109/IVS.2003.1212924
[AbstractPlus](#) | Full Text: [PDF\(376 KB\)](#) IEEE CNF
[Rights and Permissions](#)
16. **Fuzzy logic control of motor vehicle**
Szczepaniak, C.; Szosland, A.S.;
[Intelligent Vehicle Symposium, 2002. IEEE](#)
Volume 2, 17-21 June 2002 Page(s):364 - 369 vol.2
[AbstractPlus](#) | Full Text: [PDF\(392 KB\)](#) IEEE CNF
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17. **Design of steering controller and analysis of vehicle lateral dynamics un disturbances**
Han-Shue Tan; Ching-Yao Chan;
[American Control Conference, 2000. Proceedings of the 2000](#)
Volume 3, 28-30 June 2000 Page(s):2023 - 2027 vol.3
Digital Object Identifier 10.1109/ACC.2000.879556
[AbstractPlus](#) | Full Text: [PDF\(452 KB\)](#) IEEE CNF
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18. **Lateral displacement sensor placement and forward velocity effects on s control of vehicles**
Alleyne, A.; DePoorter, M.;
[American Control Conference, 1997. Proceedings of the 1997](#)
Volume 3, 4-6 June 1997 Page(s):1593 - 1597 vol.3
Digital Object Identifier 10.1109/ACC.1997.610852
[AbstractPlus](#) | Full Text: [PDF\(396 KB\)](#) IEEE CNF
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19. **Simulating an optical guidance system for the recovery of an unmanned vehicle**
Deltheil, C.; Didier, L.; Hospital, E.; Brutzman, D.P.;
[Oceanic Engineering, IEEE Journal of](#)

Volume 25, Issue 4, Oct. 2000 Page(s):568 - 574

Digital Object Identifier 10.1109/48.895364

[AbstractPlus](#) | [References](#) | Full Text: [PDF\(256 KB\)](#) IEEE JNL

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20. **The system development of unmanned vehicle for the teleoperated system with driving simulator**

Duk-Sun Yun; Jae-Heung Shim; Min-Seok Kim; Young-Hoon Park; Jung-Ha K
[Robotics and Automation, 2001. Proceedings 2001 ICRA. IEEE International C](#)
Volume 1, 2001 Page(s):686 - 691 vol.1

Digital Object Identifier 10.1109/ROBOT.2001.932630

[AbstractPlus](#) | Full Text: [PDF\(651 KB\)](#) IEEE CNF

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21. **Robust two degree-of-freedom vehicle steering controller design**

Guvenc, B.A.; Bunte, T.; Odenthal, D.; Guvenc, L.;
[Control Systems Technology, IEEE Transactions on](#)
Volume 12, Issue 4, July 2004 Page(s):627 - 636

Digital Object Identifier 10.1109/TCST.2004.824960

[AbstractPlus](#) | [References](#) | Full Text: [PDF\(368 KB\)](#) IEEE JNL

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22. **On-center handling characteristics of motor driven power steering system**

Hae-ryong Choi; Ho-gi Kim; Hyun-ho Kim; Je-Ha Ryu;
[Mechatronics, 2005. ICM '05. IEEE International Conference on](#)
10-12 July 2005 Page(s):168 - 172

[AbstractPlus](#) | Full Text: [PDF\(271 KB\)](#) IEEE CNF

[Rights and Permissions](#)

23. **Vehicle steering assistance in extreme situations using a fuzzy logic controller**

Brown, G.L.; Hung, J.C.;
[Industrial Technology, 1994. Proceedings of the IEEE International Conference](#)
5-9 Dec. 1994 Page(s):225 - 229

Digital Object Identifier 10.1109/ICIT.1994.467124

[AbstractPlus](#) | Full Text: [PDF\(280 KB\)](#) IEEE CNF

[Rights and Permissions](#)

24. **Adaptive control of a hybrid electric vehicle**

Saeks, R.; Cox, C.J.; Neidhoefer, J.; Mays, P.R.; Murray, J.J.;
[Intelligent Transportation Systems, IEEE Transactions on](#)
Volume 3, Issue 4, Dec. 2002 Page(s):213 - 234

Digital Object Identifier 10.1109/TITS.2002.804750

[AbstractPlus](#) | [References](#) | Full Text: [PDF\(2715 KB\)](#) IEEE JNL

[Rights and Permissions](#)

25. **A new nonlinear control for vehicle in sliding conditions: application to a guidance of farm vehicles using RTK GPS**

Lenain, R.; Thuilot, B.; Cariou, C.; Martinet, P.;
[Robotics and Automation, 2004. Proceedings. ICRA '04. 2004 IEEE International](#)
Volume 5, 26 April-1 May 2004 Page(s):4381 - 4386 Vol.5

Digital Object Identifier 10.1109/ROBOT.2004.1302407

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-
- ☐ 1. **Behavioural accident avoidance science: Understanding response in collision incipient conditions**
P A Hancock, S N De Ridder. Ergonomics. London: Oct 10, 2003. Vol. 46, Iss. 12; p. 1111
 [Abstract](#)
-
- ☐ 2. **Kingston, Pa., Vehicle Owners Check Out Driving Simulators**
Lane Filler. Knight Ridder Tribune Business News. Washington: Sep 14, 2003. p. 1
 [Full text](#)  [Abstract](#)
-
- ☐ 3. **Electronic 'Driver Advocate' Helps Keep Focus on the Road In DaimlerChrysler Technology Concept**
PR Newswire. New York: Jun 12, 2003. p. 1
 [Full text](#)  [Abstract](#)
-
- ☐ 4. **Designers Giving Birth to Sensible Cars**
Holly Mullen. The Salt Lake Tribune. Salt Lake City, Utah: May 27, 2003. p. C.1
 [Full text](#)  [Abstract](#)
-
- ☐ 5. **SIMULATOR AIDS AUTO GUIDANCE CHECKS ; ODU STUDYING WHETHER DRIVERS ARE DISTRACTED**
*[Edition]
SONJA BARISIC. Richmond Times - Dispatch. Richmond, Va.: Dec 19, 2002. p. F.3*
 [Full text](#)  [Abstract](#)
-
- ☐ 6. **Better by design?; [Ulster Edition]**
The Belfast News Letter. Belfast: Oct 12, 2002. p. 7
 [Full text](#)  [Abstract](#)
-
- ☐ 7. **Is in-car technology distracting?; [Ontario Edition]**
Graeme Fletcher. National Post. Don Mills, Ont.: Jun 28, 2002. p. DO.12
 [Full text](#)  [Abstract](#)
-
- ☐ 8. **Auto Report; [Fourth Edition]**
Times wire services. Seattle Times. Seattle, Wash.: Apr 26, 2002. p. F.1

 [Full text](#) [Abstract](#)

9. **New Driver Research Simulator at Motorola Labs Improves Understanding of How Drivers Receive, Manage Information**
PR Newswire. New York: Mar 5, 2002. p. 1

 [Full text](#) [Abstract](#)

10. **Ansoft Announces Solution for Electric, Hybrid-Electric, and Fuel-Cell Vehicle Design; Solution Spins Energy-Efficient Automobiles**
Business Editors SAE World Congress 2002. Business Wire. New York: Feb 28, 2002. p. 1

 [Full text](#) [Abstract](#)

11. **Scene modeling from motion-free radar sensing**
by Foessel, Alex, Ph.D., Carnegie Mellon University, 2002, 148 pages; AAT 3040445

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12. **Vehicle steering assist controller design using driver model uncertainty**
by Chen, Liang-kuang, Ph.D., University of Michigan, 2002, 149 pages; AAT 3057920

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13. **Future cars will read drivers' minds some of the time; [Ontario Edition]**
Edwin Colyer. National Post. Don Mills, Ont.: Jun 15, 2001. p. E.7

 [Full text](#) [Abstract](#)

14. **THERE ARE DRIVING LESSONS TO BE LEARNED FROM NEW DRIVERS; [ALL Edition]**
Deb Disandro. The Post - Tribune. Gary, Ind.: Mar 21, 2001. p. A.2

 [Full text](#) [Abstract](#)

15. **LADIES AND GENTLEMEN ... START YOUR E-MAIL DRIVERS CAN SOON GET DIRECTIONS, CHECK STOCKS, READ THEIR E-MAIL AND STILL KEEP TWO HANDS ON THE WHEEL.; [Broward Metro Edition]**
MICHAEL TURNBELL Transportation Writer. South Florida Sun - Sentinel. Fort Lauderdale, Fla.: Jan 21, 2001. p. 1

 [Full text](#) [Abstract](#)

16. **Ford to Study In-Vehicle Electronic Devices with Advanced Simulator; [1]**
Canada NewsWire. Ottawa: Jan 10, 2001. p. 1

 [Full text](#) [Abstract](#)

17. **Ford to Study In-Vehicle Electronic Devices with Advanced Simulator**
Canada NewsWire. Ottawa: Jan 10, 2001. p. 1

 [Full text](#) [Abstract](#)

18. **Ford to Study In-Vehicle Electronic Devices with Advanced Simulator; [1]**
PR Newswire. New York: Jan 10, 2001. p. 1

 [Full text](#) [Abstract](#)

19. **Ford to Study In-Vehicle Electronic Devices with Advanced Simulator**
PR Newswire. New York: Jan 10, 2001. p. 1

 [Full text](#) [Abstract](#)

20. **Warning and control for vehicle rollover prevention**
by Chen, Bo-Chiuan, Ph.D., University of Michigan, 2001, 133 pages; AAT 3000934

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-
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NED McINTOSH Correspondent. Virginian - Pilot. Norfolk, Va.: Oct 15, 2000. p. 04
[Full text](#) [Abstract](#)
-
- ☐ 22. **Driving the Bus--Almost; OCTA has five simulators to train would-be drivers. The hope is the machine save on fuel, repairs and instruction time.; [Orange County Edition]**
MONTE MORIN. Los Angeles Times. Los Angeles, Calif.: Jun 17, 2000. p. 1
[Full text](#) [Abstract](#)
-
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Kansas City Star. Kansas City, Mo.: Mar 10, 2000. p. E.8
[Abstract](#)
-
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The Ottawa Citizen. Ottawa, Ont.: Mar 10, 2000. p. C.2
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-
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BILL BERGSTROM, THE ASSOCIATED PRESS. Pittsburgh Post - Gazette. Pittsburgh, Pa.: Mar 8, 2000. p. A.7
[Full text](#) [Abstract](#)
-
- ☐ 26. **Study: Allergy drugs affect driving ability more than alcohol; [3 STAR Edition]**
Houston Chronicle. Houston, Tex.: Mar 7, 2000. p. 7
[Full text](#) [Abstract](#)
-
- ☐ 27. **OVER-THE-COUNTER ALLERGY DRUGS AFFECT DRIVERS, NEW STUDY FINDS U. OF IOWA RESEARCHERS REPORT THAT SOME HAVE GREATER EFFECT THAN ALCOHOL; [FIVE STAR LIFT Edition]**
The Associated Press. St. Louis Post - Dispatch. St. Louis, Mo.: Mar 7, 2000. p. A.7
[Full text](#) [Abstract](#)
-
- ☐ 28. **Antihistamine may impair driving HEALTH NEWS & NOTES; [Home Edition]**
The Atlanta Constitution. Atlanta, Ga.: Mar 7, 2000. p. C.2
[Full text](#) [Abstract](#)
-
- ☐ 29. **Hay-fever potions can impair drivers: An antihistamine was found to have a greater affect than alcohol, researchers say.; [Final Edition]**
Bill Bergstrom. The Vancouver Sun. Vancouver, B.C.: Mar 7, 2000. p. A.4
[Full text](#) [Abstract](#)
-
- ☐ 30. **Pursuit with driving simulator; [Elkhart - LaPorte Edition]**
DAVID TYLER. South Bend Tribune. South Bend, Ind.: Feb 3, 2000. p. D.7
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1 [A framework for modeling human-like driving behaviors for autonomous vehicles in driving simulators](#)

Talal Al-Shihabi, Ronald R. Mourant

May 2001 **Proceedings of the fifth international conference on Autonomous agents**

Publisher: ACM Press

Full text available: pdf(158.76 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A framework for modeling driver behavior within driving simulators is described in this paper. This framework serves as a basis for building human-like driving behavior models for autonomous vehicles operating within the virtual environment of a driving simulator. The framework consists of four units, the Perception Unit, the Emotions Unit, the Decision-making Unit (DMU), and the Decision-implementation Unit (DIU). The Perception Unit defines how the model perceives its environment in lo ...

2 [Queueing Network-Model Human Processor \(QN-MHP\): A computational architecture for multitask performance in human-machine systems](#)

Yili Liu, Robert Feyen, Omer Tsimhoni

March 2006 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 13 Issue 1

Publisher: ACM Press

Full text available: pdf(1.25 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Queueing Network-Model Human Processor (QN-MHP) is a computational architecture that integrates two complementary approaches to cognitive modeling: the queueing network approach and the symbolic approach (exemplified by the MHP/GOMS family of models, ACT-R, EPIC, and SOAR). Queueing networks are particularly suited for modeling parallel activities and complex structures. Symbolic models have particular strength in generating a person's actions in specific task situations. By integrating the two ...

Keywords: Cognitive model, cognition, human information processing, human-computer interaction, user interfaces

3 [Getting graphics in gear: graphics and dynamics in driving simulation](#)

Rod Deyo, John A. Briggs, Pete Doenges

June 1988 **ACM SIGGRAPH Computer Graphics , Proceedings of the 15th annual conference on Computer graphics and interactive techniques SIGGRAPH**

'88, Volume 22 Issue 4

Publisher: ACM PressFull text available:  pdf(3.63 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Man-in-the-loop simulation uses a person in the control loop to provide feedback to the system operations. Proper operator cueing must be provided to ensure a realistic response. Real-time computer graphics and dynamics both play dominant roles in providing these necessary cues. Dynamics simulation of modern vehicles requires a multi-body non-linear approach for acceptable fidelity of motion. A vehicle can be modeled as a set of linked rigid bodies, whose connections are described by a graph. Re ...

Keywords: engineering simulation, parallel algorithms, real-time dynamics, real-time graphics, vehicle simulation, visual systems

4 Simulation and games: Distinguishing games and simulation games from simulators



Viknashvaran Narayanasamy, Kok Wai Wong, Chun Che Fung, Shri Rai

April 2006 **Computers in Entertainment (CIE)**, Volume 4 Issue 2**Publisher:** ACM PressFull text available:  pdf(283.75 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The advanced computational capabilities in modern personal computers have made it possible for consumers to experience simulations with a high degree of verisimilitude through simulation games (a.k.a. Sims). In recent years, the cross-boundary technology exchange between game and simulation technology, along with other factors, has contributed to the confusion as to what makes a simulation game and what makes a simulator. This article provides a user's and designer's perspective on a definitive ...

Keywords: computer simulation games, digital games, serious games, simulators

5 A quality planning model for distributed multimedia in the virtual cockpit



Mark Claypool, John Riedl

February 1997 **Proceedings of the fourth ACM international conference on Multimedia****Publisher:** ACM PressFull text available:  pdf(1.32 MB) Additional Information: [full citation](#), [references](#), [index terms](#)

Keywords: communications/networking/VOD applications

6 Real-world applications: papers: Evolving a real-world vehicle warning system



Nate Kohl, Kenneth Stanley, Risto Mliikkulainen, Michael Samples, Rini Sherony

July 2006 **Proceedings of the 8th annual conference on Genetic and evolutionary computation GECCO '06****Publisher:** ACM PressFull text available:  pdf(1.24 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Many serious automobile accidents could be avoided if drivers were warned of impending crashes before they occur. Creating such warning systems by hand, however, is a difficult and time-consuming task. This paper describes three advances toward evolving neural networks with NEAT (NeuroEvolution of Augmenting Topologies) to warn about such crashes in real-world environments. First, NEAT was evaluated in a complex, dynamic simulation with other cars, where it outperformed three hand-coded strawman ...

Keywords: NEAT, neuroevolution, real world, vehicle

7 Predicting the effects of in-car interfaces on driver behavior using a cognitive architecture



Dario D. Salvucci

March 2001 **Proceedings of the SIGCHI conference on Human factors in computing systems**

Publisher: ACM Press

Full text available: [pdf\(275.34 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#), [review](#)

When designing and evaluating in-car user interfaces for drivers, it is essential to determine what effects these interfaces may have on driver behavior and performance. This paper describes a novel approach to predicting effects of in-car interfaces by modeling behavior in a cognitive architecture. A cognitive architecture is a theoretical frame-work for building computational models of cognition and performance. The proposed approach centers on integrating a user model for the interface w ...

Keywords: ACT-R, cellular phones, cognitive architectures, cognitive models, driving, in-car interfaces

8 Human-Computer Interaction in the Control of Dynamic Systems



William B. Rouse

March 1981 **ACM Computing Surveys (CSUR)**, Volume 13 Issue 1

Publisher: ACM Press

Full text available: [pdf\(2.77 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Modes of human-computer interaction in the control of dynamic systems are discussed, and the problem of allocating tasks between human and computer considered. Models of human performance in a variety of tasks associated with the control of dynamic systems are reviewed. These models are evaluated in the context of a design example involving human-computer interaction in aircraft operations. Other examples include power plants, chemical plants, and ships.

Keywords: aircraft, control, dynamic systems, human-computer interaction, mathematical models, system design, task analysis

9 Real-world applications: papers: Evolution of driving agent, remotely operating a scale model of a car with obstacle avoidance capabilities



Ivan Tanev, Michal Joachimczak, Katsunori Shimohara

July 2006 **Proceedings of the 8th annual conference on Genetic and evolutionary computation GECCO '06**

Publisher: ACM Press

Full text available: [pdf\(783.43 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We present an approach for evolutionary design of an agent, remotely operating a scale model of a car running in a fastest possible way. The agent perceives the environment from a video camera and conveys its actions to the car via standard radio control transmitter. In order to cope with the video feed latency we propose an anticipatory modeling in which the agent considers its current actions based on the anticipated intrinsic (rather than currently available, outdated) state of the car and it ...

Keywords: anticipatory modeling, driving agent, feedback latency, genetic algorithms

10 Assistive robotics: Spatial routines for a simulated speech-controlled vehicle



Stefanie Tellex, Deb Roy

March 2006 **Proceeding of the 1st ACM SIGCHI/SIGART conference on Human-robot interaction HRI '06**

Publisher: ACM Press

Full text available: pdf(630.38 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We have defined a lexicon of words in terms of *spatial routines*, and used that lexicon to build a speech controlled vehicle in a simulator. A spatial routine is a script composed from a set of primitive operations on occupancy grids, analogous to Ullman's visual routines. The vehicle understands the meaning of context-dependent natural language commands such as "Go across the room." When the system receives a command, it combines definitions from the lexicon according to the parse structu ...

Keywords: language grounding, situated language processing, spatial language, spatial routines, visual routines, wheelchair

11 Parallel and distributed simulation



Richard M. Fujimoto

December 1995 **Proceedings of the 27th conference on Winter simulation**

Publisher: ACM Press

Full text available: pdf(884.98 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

12 An asynchronous integration and event detection algorithm for simulating multi-agent hybrid systems



Joel M. Esposito, Vijay Kumar

October 2004 **ACM Transactions on Modeling and Computer Simulation (TOMACS)**,
Volume 14 Issue 4

Publisher: ACM Press

Full text available: pdf(299.01 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A simulation algorithm is presented for multi-agent hybrid systems---systems consisting of many sets of nonsmooth differential equations---such as systems involving multiple rigid bodies, vehicles, or airplanes. The differential equations are partitioned into coupled subsystems, called "agents"; and the conditions which trigger the discontinuities in the derivatives, called "events", may depend on the global state vector. Such systems normally require significant computational resources to si ...

Keywords: Event detection, hybrid systems, multi-agent systems, numerical integration

13 A Criticality Analysis of Clustering in Superscalar Processors

Pierre Salverda, Craig Zilles

November 2005 **Proceedings of the 38th annual IEEE/ACM International Symposium on Microarchitecture MICRO 38**

Publisher: IEEE Computer Society

Full text available: pdf(448.82 KB) Additional Information: [full citation](#), [abstract](#)
 [Publisher Site](#)

Clustered machines partition hardware resources to circumvent the cycle time penalties incurred by large, monolithic structures. This partitioning introduces a long inter-cluster

forwarding latency and the potential for load imbalance, both of which degrade IPC and thus counter the cycle time benefits of clustering. We show that program dataflow can be mapped to clustered machines so as to achieve an IPC rivaling that of an equivalent monolithic machine. That is, the IPC penalties observed by ex ...

14 Advanced tutorials: Parallel simulation: parallel and distributed simulation systems

Richard M. Fujimoto

December 2001 **Proceedings of the 33rd conference on Winter simulation**

Publisher: IEEE Computer Society

Full text available:  [pdf\(255.36 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Originating from basic research conducted in the 1970's and 1980's, the parallel and distributed simulation field has matured over the last few decades. Today, operational systems have been fielded for applications such as military training, analysis of communication networks, and air traffic control systems, to mention a few. This tutorial gives an overview of technologies to distribute the execution of simulation programs over multiple computer systems. Particular emphasis is placed on synchro ...

15 Parallel and distributed simulation



Richard M. Fujimoto

December 1999 **Proceedings of the 31st conference on Winter simulation: Simulation--a bridge to the future - Volume 1**

Publisher: ACM Press

Full text available:  [pdf\(118.56 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

16 Collision detection and proximity queries



Sunil Hadap, Dave Eberle, Pascal Volino, Ming C. Lin, Stephane Redon, Christer Ericson

August 2004 **Proceedings of the conference on SIGGRAPH 2004 course notes GRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(11.22 MB\)](#) Additional Information: [full citation](#), [abstract](#)

This course will primarily cover widely accepted and proved methodologies in collision detection. In addition more advanced or recent topics such as continuous collision detection, ADFs, and using graphics hardware will be introduced. When appropriate the methods discussed will be tied to familiar applications such as rigid body and cloth simulation, and will be compared. The course is a good overview for those developing applications in physically based modeling, VR, haptics, and robotics.

17 What makes virtual systems a reality



Farid Mamaghani

May 1994 **ACM SIGGRAPH Computer Graphics**, Volume 28 Issue 2

Publisher: ACM Press

Full text available:  [pdf\(705.58 KB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

If posed as a question, one possible answer to the title is: "sufficient resources." Given enough resources, sometimes referred to as infinite dollars, it is plausible that one can realize a life-like virtual environment, or the ultimate simulation system. For most of us, however, the fact remains that resources (time, money, processing power) are limited. Our objective then becomes to engineer solutions that satisfy the intended use of the product while remaining within bounds of the resource c ...

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Synchronizing simulations in distributed interactive simulation

Sandra Cheung, Margaret Loper

December 1994 **Proceedings of the 26th conference on Winter simulation**

Publisher: Society for Computer Simulation International

Full text available:  pdf(763.91 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

19 [Link and channel measurement: A simple mechanism for capturing and replaying wireless channels](#)



Glenn Judd, Peter Steenkiste

August 2005 **Proceeding of the 2005 ACM SIGCOMM workshop on Experimental approaches to wireless network design and analysis E-WIND '05**

Publisher: ACM Press

Full text available:  pdf(6.06 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Physical layer wireless network emulation has the potential to be a powerful experimental tool. An important challenge in physical emulation, and traditional simulation, is to accurately model the wireless channel. In this paper we examine the possibility of using on-card signal strength measurements to capture wireless channel traces. A key advantage of this approach is the simplicity and ubiquity with which these measurements can be obtained since virtually all wireless devices provide the req ...

Keywords: channel capture, emulation, wireless

20 [Translating discrete-time simulink to lustre](#)



Stavros Tripakis, Christos Sofronis, Paul Caspi, Adrian Curic

November 2005 **ACM Transactions on Embedded Computing Systems (TECS)**, Volume 4 Issue 4

Publisher: ACM Press

Full text available:  pdf(827.48 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We present a method of translating discrete-time Simulink models to Lustre programs. Our method consists of three steps: type inference, clock inference, and hierarchical bottom-up translation. In the process, we explain and formalize the typing and timing mechanisms of Simulink. The method has been implemented in a prototype tool called S2L, which has been used in the context of a European research project to translate two automotive controller models provided by Audi.

Keywords: Code generation, Lustre, Simulink, embedded software

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steering wheel angle and look ahead

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MF Land, DN Lee - Nature, 1994 - nature.com

Where we **look** when we steer. ... information from the changing pattern of the road **ahead**. ...We have made simultaneous recordings of **steering-wheel angle** and drivers ...Cited by 172 - [Web Search](#) - [BL Direct](#)A general framework for automatic **steering** control: system analysisS Patwardhan, HS Tan, J Guldner - American Control Conference, 1997. Proceedings of the 1997, 1997 - [ieeexplore.ieee.org](#)... long vehicle, effectively resulting in a **look-ahead** system ... paper that the extension of **look-** down systems ... 1. The front **wheel steering angle** δ , is realized by an ...Cited by 40 - [Web Search](#) - [BL Direct](#)**Steering** control of high speed vehicles: dynamic **look ahead** and yawrate feedbackC Chen, HS Tan - Decision and Control, 1998. Proceedings of the 37th IEEE ..., 1998 - [ieeexplore.ieee.org](#)... In other words, the transfer function from the front **wheel steering angle** to lateral acceleration at the **look-ahead** point becomes a constant gain. ...Cited by 13 - [Web Search](#) - [BL Direct](#)Development of an automated **steering** vehicle based on roadway magnets-a case study of mechatronic ... - group of 2 »HS Tan, J Guldner, S Patwardhan, C Chen, B Bougler - Mechatronics, IEEE/ASME Transactions on, 1999 - [ieeexplore.ieee.org](#)... performance, in particular, when a **look-** down lateral ... Minimum **steering** actuator specifications have, thus, been ... **wheel** or 0.4% of road **wheel angle**, whichever is ...Cited by 28 - [Web Search](#) - [BL Direct](#)Recursive 3-D road and relative ego-state recognition - group of 6 »ED Dickmanns, BD Mysliwetz - Pattern Analysis and Machine Intelligence, IEEE Transactions ..., 1992 - [ieeexplore.ieee.org](#)... while driving on the road with constant speed and **steering wheel** turn rates ... that horizontal and vertical curvature relative to the visual **look-ahead** range (to ...Cited by 185 - [Web Search](#)... design of a **look-down** feedback adaptive controller for the lateral control of front-**wheel-steering** ... - group of 4 »SB Choi - Vehicular Technology, IEEE Transactions on, 2000 - [ieeexplore.ieee.org](#)... vision sensor has the advantage of **look-ahead**, which makes ... the yaw rate as , front **wheel steering angle** as , cornering ... CHOI: THE DESIGN OF A LOOK-DOWN FEEDBACK ...Cited by 10 - [Web Search](#) - [BL Direct](#)Robust Automatic **Steering** Control for **Look-Down** Reference Systems with Front and Rear Sensors - group of 3 »J Guldner, W Sienel, HS Tan, J Ackermann, S ... - IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY, 1999 - [ieeexplore.ieee.org](#)... For the augmented **look-down** reference system as ... are also shown: vehicle side slip **angle** between the ... and vehicle yaw rate The front **wheel steering angle** is the ...

